CLAIMS

1. An image overlay apparatus, comprising:

a memory for storing a first set of display data, the first set of display data including a set of key data associated with a key data value;

an input for receiving a second set of display data;

an output for transmitting a set of output display data; and

a comparison component configured to compare a portion of the first set of display data to the key data value to determine whether the portion of the first set of display data is to be modified with a corresponding portion of the second set of display data.

2. An image overlay apparatus as recited in claim 1, wherein the comparison component is configured to modify the portion of the first set of display data with the corresponding portion of the second set of display data during a transmission of the first set of display data to the output.

3. An image overlay apparatus as recited in claim 2, wherein the second set of display data represents multiple frames of image data transmitted from a camera.

4. An image overlay apparatus as recited in claim 3, wherein the second set of display data includes a synchronization signal, the comparison component defined to use the synchronization signal for determining when to start comparing the portion of the first set of display data to the key data value.

5. An image overlay apparatus as recited in claim 1, further comprising:

a liquid crystal display (LCD) panel, the LCD panel configured to receive the set of output display data, wherein the LCD panel includes a memory region.

6. An image overlay apparatus as recited in claim 1, wherein the key data value is a single color value.

7. An image overlay apparatus as recited in claim 1, wherein the set of key data is defined to occupy a variable size, a variable shape, and a variable location within the first set of display data.

8. An image overlay apparatus as recited in claim 1, wherein the set of key data defines a picture-in-picture window.

9. An image overlay apparatus as recited in claim 1, wherein the comparison component is configured to modify the portion of the first set of display data with the corresponding portion of the second set of display data prior to a transmission of the first set of display data to the output.

10. An image overlay apparatus as recited in claim 1, further comprising:

an encoding component capable of receiving the set of output display data and converting the set of output display data to a digital format suitable for storage.

11. An image overlay apparatus as recited in claim 1, wherein modifying the portion of the first set of display data includes replacing the portion of the first set of display data with the corresponding portion of the second set of display data.

12. An image overlay apparatus as recited in claim 1, wherein modifying the portion of the first set of display data includes performing a logical operation using the portion of the first set of display data and the corresponding portion of the second set of display data.

13. A display controller, comprising:

a memory region configured to store display data, the display data having key data integrated therein; and

comparison circuitry configured to receive both image overlay data from a source external to the memory region and the display data from the memory region according to a synchronization signal, the comparison circuitry further configured to modify the key data with the image overlay data during transmission of the display data to a display panel.

14. A display controller as recited in claim 13, wherein the image overlay data is a video stream.

15. A display controller as recited in claim 13, wherein the comparison circuitry is configured to compare the display data to a key data value to identify a location of the key data within the display data.

16. A display controller as recited in claim 13, wherein the key data is defined as a single color value.

17. A display controller as recited in claim 13, wherein the key data defines a picture-in-picture window.

18. A display controller as recited in claim 13, further comprising:

an encoding component capable of receiving the display data having the key data modified with the image overlay data, the encoding component configured to convert the display data to a digital format suitable for storage.

19. A display controller as recited in claim 13, wherein modifying the key data includes replacing the key data with the image overlay data.

20. A display controller as recited in claim 13, wherein modifying the key data includes performing a logical operation using the key data and the image overlay data.

21. A method for operating an image overlay apparatus, comprising:

establishing a first portion of a first set of display data with key data, the key data being defined by a key data value;

receiving a second set of display data, the second set of display data defining an image having a shape and a size;

comparing a second portion of the first set of display data to the key data value, the second portion of the first set of display data representing the shape and the size of the image defined by the second set of display data;

modifying the key data within the first portion of the first set of display data with corresponding portions of the second set of display data; and

transmitting the first set of display data to a display component.

22. A method for operating an image overlay apparatus as recited in claim 21, wherein modifying the key data with corresponding portions of the second set of display data is performed with the first set of display data contained within a memory.

23. A method for operating an image overlay apparatus as recited in claim 22, wherein the second set of display data represents a single frame of image data.

24. A method for operating an image overlay apparatus as recited in claim 21, wherein modifying the key data with corresponding portions of the second set of display data is performed during the transmission of the first set of display data to the display component.

25. A method for operating an image overlay apparatus as recited in claim 24, wherein the second set of display data represents a frame of image data from a video transmission.

26. A method for operating an image overlay apparatus as recited in claim 21, wherein the method operation of modifying the key data within the first portion of the first set of display data with corresponding portions of the second set of display data includes detecting a synchronization signal.

27. A method for operating an image overlay apparatus as recited in claim 21, wherein establishing the first portion of the first set of display data with key data is capable of allowing the first portion to have a variable shape, a variable size, and a variable location within the first set of display data.

28. A method for operating an image overlay apparatus as recited in claim 21, wherein the key data defines a picture-in-picture window.

29. A method for operating an image overlay apparatus as recited in claim 21, wherein the key data is represented as a single color value.

30. A method for operating an image overlay apparatus as recited in claim 21, further comprising:

receiving the first set of display data to be provided to the display component; and

converting the first set of display data to a digital format suitable for storage.

31. A method for operating an image overlay apparatus as recited in claim 21, wherein modifying the key data includes replacing the key data with the corresponding portions of the second set of display data.

32. A method for operating an image overlay apparatus as recited in claim 21, wherein modifying the key data includes performing a logical operation using the key data and the corresponding portions of the second set of display data.